

NAVAL POSTGRADUATE SCHOOL
Monterey, California



THESIS

**A FULL COST ANALYSIS OF THE REPLACEMENT OF
NAVAL BASE, GUANTANAMO BAY'S MARINE GROUND
DEFENSE FORCE BY THE FLEET ANTITERRORISM
SECURITY TEAM**

by

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December 2000

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GUANTANAMO BAY'S MARINE GROUND DEFENSE FORCE BY THE
FLEET ANTITERRORISM SECURITY TEAM**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

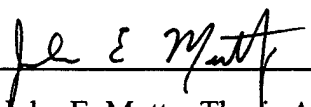
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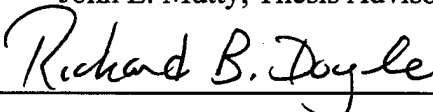
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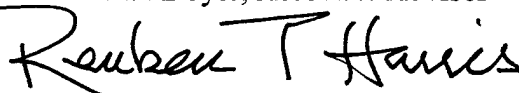

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ABSTRACT

Constrained defense budgets and manpower resources have motivated the United States Marine Corps and the United States Navy to seek initiatives that maximize the efficient use and allocation of these diminishing resources. One such initiative is the restructuring of the Marine security presence at Naval Station, Guantanamo Bay, Cuba, through the replacement of the 350 man Marine Ground Defense Force with a smaller, rotating unit consisting of two platoons from the Fleet Antiterrorism Security Team (FAST) Company. Ostensibly, FAST would be able to perform the same security mission as effectively as the Ground Defense Force with fewer personnel and infrastructure requirements, resulting in both financial and manpower savings. This thesis performs a full cost analysis of this initiative to determine whether any cost savings will be realized. By reviewing and comparing historical cost data and Marine Corps budget estimates, the study determined that there are no real financial savings in executing the proposal. The Marine Corps and Department of the Navy may, however, achieve benefits in better manpower utilization and opportunity cost savings by exercising this option.

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I. INTRODUCTION

A. PURPOSE

The research will analyze the costs involved in replacing the Marine Ground Defense Force at Naval Station, Guantanamo Bay, Cuba with two Marine Fleet Antiterrorism Security Team (FAST) platoons. The objective is to determine the overall cost of replacing the Ground Defense Force with a rotating FAST security force. Research will consist of an in-depth analysis of the costs of maintaining the current security force structure, followed by the costs of deploying and supporting two FAST platoons. Some of the costs to be considered are billeting, messing, transportation, training and ammunition, as well any physical security improvements that may be included. The research will provide a full cost perspective of the planned replacement operation as well as whether the Marine Corps will achieve any cost savings from the plan.

B. DISCUSSION

The Marine presence at Guantanamo Bay, Cuba has been continuous since 1898 when during the Spanish American War, a Marine battalion under the command of Lieutenant Colonel Robert Huntington defeated local Spanish Forces at Cuzco Wells. Since then, Marines have been the primary security force for the U.S. Naval Base though it was not until 1953 that the current Ground Defense Force was formally established.

Increasing in size to a peak of 1850 Marines in 1967, the force has steadily declined to its present 350 Marine strength.

The mission of the Ground Defense Force is to provide internal perimeter security for the Naval Base. This involves manning the 17.4-mile perimeter around the clock. Observation posts along the perimeter are manned by pairs of Marines who share 12-hour watches with one Marine awake at all times. Other Marines patrol the area between the fence lines in vehicles and on foot. Their job is to look out for any signs of Cubans (mainly refugees) attempting to cross the fence into U.S. territory. Though the threat of a Cuban invasion has diminished greatly over the years, Cuban soldiers patrol their own fence line less than 1000 meters from their Marine counterparts.

A declining Cuban threat in conjunction with declining defense budget dollars has led to several years of downsizing of naval personnel at Guantanamo Bay. Since 1994, the base population has been cut in half, from 6000 service members, dependents and civilian employees to about 3000 today. Throughout these cutbacks, the Marine presence has remained relatively constant.

Following this downsizing trend, recently Headquarters U.S. Marine Corps along with Marine Forces Atlantic, have been reviewing options on how to also reduce the Marine security presence. The most heavily favored option is to replace the current 350-man Marine Ground Defense Force with a smaller unit made up of two platoons (90 Marines) from the Fleet Antiterrorism Security Team (FAST) Companies. The Virginia based 1st and 2d FAST Companies would exchange security responsibilities as they rotate

their respective platoons on and off island every 90 days. The impetus would be that FAST would be able to perform the security mission as effectively as the Ground Defense Marines with fewer personnel and infrastructure requirements (approximately 20% of the Ground Defense Force are support) resulting in a net gain of more than 200 Marines that would return to operating forces, as well as creating greater efficiencies through the utilization of a smaller, better trained force equipped with the latest security technology. In the event of a Cuban military threat, the platoons would be rapidly reinforced by the 2d Marine Expeditionary Force from Camp Lejeune, North Carolina.

Though a smaller force, the 45 man FAST Platoons are highly trained in antiterrorism and force protection tactics. They are armed with a full array of small arms and crew served weapons that include heavy machine guns and mortars. Typically, one full 12-man squad is trained in Close Quarters Battle (CQB) tactics. Platoons are led by Captains from combat arms occupational specialties. Each platoon has one staff non-commissioned and six to eight non-commissioned officers (Sergeants and Corporals), most coming from tours with operating forces. Because of their unique skills and rapid deployability, FAST in recent years, has become the force of choice for antiterrorism security missions.

The objective of this project is to identify the costs involved in replacing the Marine Ground Defense Force by two FAST platoons and to compare those costs with the current cost of maintaining the current security force structure. By providing a full

cost perspective of the planned replacement operation, a better understanding can be garnered on whether the Marine Corps will achieve any cost savings from the plan.

C. RESEARCH QUESTIONS

1. Primary Research Question

What is the full cost of replacing Naval Station, Guantanamo Bay's Ground Defense Force with two Platoons of the Fleet Antiterrorism Security Team?

2. Secondary Questions

- a. What is the annual cost of maintaining the current Marine Ground Defense Force?
- b. What will be the cost of returning the Marines of the Ground Defense Force to CONUS?
- c. What will be the annual cost of transporting two FAST platoons to and from Guantanamo Bay, Cuba?
- d. What will be the cost of billeting and messing for two FAST platoons?
- e. What will be the cost of both commercial and tactical vehicle support for two FAST platoons and how do those costs compare with current vehicle costs?
- f. What will be the cost, including ammunition, of sustainment training for the two FAST platoons in comparison to current ammunition costs?

- g. What is the cost of any physical security improvements to support the FAST mission?
- h. What will be the opportunity cost of devoting two FAST platoons to an on-going security mission?

D. SCOPE OF THE THESIS

The scope of the thesis will consist of: (1) a comprehensive examination of FAST's mission of securing Naval Base, Guantanamo Bay (2) the equipment and personnel requirements for carrying out the mission and their resulting costs and (3) the cost of maintaining the current Marine Ground Defense Force.

E. METHODOLOGY

The methodology used will incorporate the following steps:

1. Conduct a review of historical costs of maintaining the Marine Ground Defense Force.
2. Obtain costs of returning Marines of the Ground Defense Force to CONUS.
3. Identify all personnel and equipment requirements to support the FAST security mission and their associated costs.
4. Obtain billeting and messing costs to support the FAST mission.
5. Identify training costs to include the cost of ammunition.
6. Obtain the cost of transporting two FAST platoons to and from Guantanamo Bay.

7. Compile all costs identified to develop a full cost perspective of the FAST security mission.
8. Compare the cost of maintaining the Ground Defense Force with the cost of conducting a FAST security mission to identify any cost savings.
9. Conduct a thorough review of the current employment of FAST to identify the opportunity cost of devoting two FAST platoons to an on-going security mission.

F. ORGANIZATION

Chapter I: Introduction, Background

Chapter II: Overview of the Security Requirements

Chapter III: Cost Presentation

Chapter IV: Cost Comparisons

Chapter V: Conclusions, Recommendations

G. BENEFIT OF THE STUDY

By providing a full cost perspective of supporting the FAST security mission at Naval Base, Guantanamo Bay, proper funding levels can be established to sustain future operations.

II. OVERVIEW OF THE SECURITY REQUIREMENTS

A. THE MISSION

The mission of the Marine Ground Defense Force is to provide such security as approved by the Chief of Naval Operations in coordination with the Commandant of the Marine Corps and perform such additional functions as directed by the Commandant of the Marine Corps. (Ref. 1) The proposed replacement of the current Marine Ground Defense Force by a subordinate company of the Marine Corps Security Force Battalion made up of rotating Fleet Antiterrorism Security Team platoons is grounded in the intent that the security mission will be carried out unchanged, despite the consequent reduction in personnel. As stated by the Commander of Marine Forces Atlantic, Lieutenant General Peter Pace, "A capable, ready, and reliable security support capability will be continuously maintained, available, and responsive to the security support mission tasking from COMNAVSTA, Guantanamo Bay." (Ref. 2)

B. CURRENT SECURITY FUNCTIONS OF THE GROUND DEFENSE FORCE

In order to execute its mission, the Marine Ground Defense force conducts or is prepared to conduct the following four primary security functions:

1. Conduct a continuous reconnaissance screen of the Naval Base perimeter in order to deter and or detect penetrations by Cuban military forces.

2. Be prepared to conduct a ground defense of the navy base until relieved, to include the support of Non-combatant Evacuation Operations (NEO).
3. Be prepared to conduct external security support for migrant operations.
4. Be prepared to conduct external security support for humanitarian operations. (Ref. 1)

The 350 Marines of the Ground Defense Force carry out these functions through the use of observation posts, strong points and reactionary forces. Ten observation posts (five on the leeward side of the base and five on the windward side) cover a 17.5-mile perimeter. Two Marines man each post (one alert at all times) 24 hours a day. Numerous strong points consisting of hardened concrete bunkers have been established on both the leeward and windward sides. If needed, these strong points would be occupied based on the nature of the attack. They also provide the capability to quickly establish security positions to support migrant camp and NEO operations. However, many of these positions are badly in need of repair and will continue to deteriorate without a concerted maintenance effort. The leeward and windward sides each have a squad sized (12 Marines) reactionary force on constant 24 hour alert, ready to respond to any breaches in security.

C. PROPOSED FAST COURSE OF ACTION

The concept of operations for the replacement of the Marine Ground Defense Force by a rotating Fleet Antiterrorism Security Team platoon must satisfy the Marine Corps' intent to execute the current security support mission unchanged. It fulfills this

intent, not by changing the mission, but rather by modifying the way the existing security functions are performed. These modifications allow for the execution of the security mission with fewer personnel. According to the Marine Corps, the modifications will allow for a more efficient (through the reduction in personnel), if not more effective execution of the current mission (Ref. 1). Regardless, the security support mission will still be carried out.

The proposed FAST security functions are:

1. Maintain an overt security presence along the perimeter to detect and or deter infiltration by Cuban military forces or personnel seeking asylum.
2. Conduct random antiterrorism security measures to deter attack against critical assets by Cuban unconventional forces or terrorists.
3. Be prepared to establish security for two migrant camps, each camp to hold up to 150 personnel, until relieved by a Joint Task Force.
4. Be prepared to support the evacuation of U.S. personnel under a permissive environment. (Ref. 1)

The FAST platoon would perform its functions in a manner similar to the way the Ground Defense Force performs its security functions. Observation posts and a reactionary force would still be maintained, but with a few modifications. Instead of ten observation posts, one squad would randomly occupy three to five posts 24 hours a day. The platoon would still maintain a squad sized reactionary force. However, the reactionary force would have the additional responsibility of conducting random

antiterrorism measures in the form of offensive, defensive and patrolling exercises along the naval station perimeter. (Ref.1)

Under normal circumstances, the platoon's remaining squad would be in an off-duty status. But, if the need arises, the off-duty squad would be activated to perform the migrant camp or NEO security functions. The platoon would be able to perform these functions for no more than ten days, upon which a joint task force would have to provide relief. Furthermore, FAST deployments would be scheduled so that platoon rotations would overlap in a manner where two FAST platoons would be deployed to Guantanamo Bay 50 percent of the time. The second platoon would reinforce the deterrence and detection efforts of the other platoon, as well as any migrant camp or NEO security operation. (Ref. 1)

To enhance the ability of the FAST platoon to deter and detect, and/or respond to an infiltration, physical security improvements have been recommended. A key recommendation is to illuminate the perimeter fence and to alarm it with sensors and/or cameras. Doing this would have the most significant impact on overall security, but would also offer the biggest cost, which is estimated at 1.8 million dollars. (Ref. 1)

D. RESOURCES REQUIRED

In order to support the replacement operation, the Marine Corps must increase the size of FAST's parent unit, the Marine Corps Security Battalion. The increase would come in the form of three additional FAST platoons, additional Battalion support

personnel and a permanent headquarters element in Guantanamo Bay to provide oversight and administrative support for the rotating platoons. The Marines from the disestablished Ground Defense Force would provide the additional personnel structure that would make these additions possible. (Ref. 1) Even with the personnel increase for Marine Security Force Battalion, a significant number of Marines would still be returned to the operating forces.

Table 2.1 shows the grade and military occupational specialties (MOS) for the proposed company headquarters element. Table 2.2 details the personnel structure that will be transferred to Marine Corps Security Force Battalion to support the Guantanamo Bay mission.

Table 2.1 Proposed Table of Organization for MCSFCo GTMO From Ref. (1)

Billet	GRADE	MOS	Officers	Enlisted
Commanding Officer	Maj	9910		
Executive Officer	Capt	9910	1	
First Sergeant	1stSgt	9999	1	
Co Gunnery Sergeant	GySgt	8152		1
Supply NCOIC	SSgt	3043		1
Supply Clerk	LCpl	3043		1
Armorer	LCpl	2111		1
Admin Clerk	LCpl	0151		1
Trng Chief	Sgt	8152		2
Trng Clerk	LCpl	8152		1
Dispatcher	LCpl	3531		1
				1
	TOTAL		2	10

Table 2.2 Structure to be transferred to MCSFBn From Ref. (1)

Billet	GRADE	MOS	Officer	Enlisted
S-4/Logistics Officer	Maj	0402	1	
Exercise/Force Depl Off	Capt	9910	1	
Radio Operator	LCpl	2531		4
MT Chief	GySgt	3537		1
Auto mechanic	LCpl	3521		2
Dispatcher	Sgt	3531		1
Embark Clerk	Cpl	0431		1
Armorer	LCpl	2111		2
Admin Chief	MSgt	0193		1
Personnel Clerk	LCpl	0121		2
Admin Clerk	LCpl	0151		2
Postal Clerk	Cpl	0161		1
	TOTAL		2	17
Create 3 FAST Platoons to support GTMO rotation (2/43)			6	129

The support that the base must provide is consistent with what is typically provided other Marine security forces assigned to Navy commands. This support includes messing, billeting, vehicles, morale, welfare, recreation and postal services. Of these services, only vehicle support is not currently provided to the Ground Defense Force. Costs for these services as well as all other relevant costs such as transportation to and from Cuba for the rotating platoons will be presented in detail in Chapter 3.

III. COST PRESENTATION

A. SOURCE OF COST DATA AND COST DESCRIPTION

The data presented in this chapter were obtained from the Naval Station Guantanamo Bay, Cuba, Comptroller's office via the Operations and Fiscal Sections of Marine Corps Security Force Battalion. The costs presented are operating costs that include both the historical costs of maintaining the current Marine Ground Defense Force, and the projected future costs of operating the new Marine Corps Security Force Company, Guantanamo Bay, Cuba, which will consist of the rotating FAST platoons. In addition to the historical and future cost data, a definition of non-operating costs and why these were not considered is also included.

B. HISTORICAL COST TO MAINTAIN THE MARINE GROUND DEFENSE FORCE

The cost to maintain the current ground defense force can be divided into two general categories: Marine operations and maintenance costs and naval base support costs. Marine operations and maintenance costs involve funding for training, personnel administration, and supply and logistics that support security operations. Naval base support costs consist of both the funding for the operating and maintenance of base facilities such as the barracks, mess hall, and Morale, Welfare, and Recreation areas that

support the security mission and provide for the Marines' quality of life, and the salaries of civilian personnel that operate and/or maintain these facilities.

Based on a Table of Organization (T/O) of 21 officers and 318 enlisted Marines, the Operations and Maintenance budget for the Marine Ground Defense Force for Fiscal Year (FY) 2000 was \$651,000 (Ref. 2). Table 3.1 provides a detailed list of all facilities that support the Marine security mission and their associated operating and maintenance costs. As of March 1, 2000, 34 civilian employees were associated with Marine Ground Defense Force support contracts. 26 of these employees are paid through appropriated funds, with salaries totaling \$338,063.10. The remaining eight employees have their salaries totaling \$102,054.08 paid through non-appropriated funds.

Table 3.1 Base buildings/facilities supporting the Marine Ground Defense Force with associated costs From Ref. (3)

Building #	Function	FY 99	FY00
M201	Marine Barracks/Command Post	\$27,973	\$27,900
2130	Communications Center/MARS Station	\$1,306	\$1300
1679	Quick Mess Hall	\$40,733	\$40,700
1678	Bachelor Enlisted Quarters (BEQ)	\$78,886	\$78,800
2122	Armory	\$2,112	\$2,100
M203	Satellite Fitness Center	\$7,029	\$7,000
M202	Navy Exchange Mini-mart	\$1,655	\$1,600

M211	Morale Welfare Recreation Swimming Pool	\$103,300	\$103,300
M612	Motor Transport Maintenance	\$1,768	\$1,768
AV622	Leeward Command Post	\$17,548	\$17,548
1334	Leeward Motor Transport	\$939	\$939
1868	Sentry Tower #21	\$2,067	\$2000
1911	Sentry Tower #24	\$2,217	\$2,200
1912	Sentry Tower #26	\$2,067	\$2,000
1915	Sentry Tower #37	\$2,217	\$2,200
1918	Sentry Tower #43	\$2,067	\$2,000
1919	Sentry Tower #45	\$2,067	\$2,000
1920	Sentry Tower #1	\$2,817	\$2,800
1922	Sentry Tower #3	\$2,217	\$2,200
1925	Sentry Tower #6	\$2,067	\$2,000
1927	Sentry Tower #8	\$2,217	\$2,200
1932	Sentry Tower #13	\$5,267	\$5,200
1936	Sentry Tower #18	\$2,067	\$2,000
1939	Sentry Tower #31	\$2,217	\$2,200
2314	Sentry Tower #34	\$2,067	\$2,000
2313	Sentry Tower #20	\$2,067	\$2,067
M129	Racquetball Court	\$950	\$950

M207	Winward Command Post	\$25,000	\$25,000
M217	Moral Welfare Recreation Club "Post 46"	\$16,522	\$16,500
M218	Outback Staff Non-commissioned Officer (SNCO) Club	\$1,500	\$1,500
M222	Communications Platoon Building	\$2,000	\$2,000
M610	Carpentry Shop	\$5,000	\$5,000
M611	Supply	\$2,941	\$2,941
M614	Motor Transport Operations: Vehicle Bays	\$300	\$300
M615	Motor transport Operations: Dispatcher	\$5,000	\$5,000
1990	Lyceum Outdoor Theater	\$300	\$300
AV525	Leeward Bachelor Enlisted Quarters	\$37593	\$37,600
1567	Storage Facility	\$803	\$0
523	Leeward Swimming Pool	NA	NA
1311	Leeward Bowling Alley	\$1,400	\$300
1314	Leeward Fitness Center	\$1,000	\$0
1574	Racquetball Court Facility	\$280	\$0
1533	Racquetball Court Facility	\$280	\$0
1534	Racquetball Court Facility	\$280	\$0
1575	Racquetball Court Facility	\$280	\$0
2022	MWR Club Storage	\$1,300	\$1,300
	Totals	\$421,683	\$416,558

C. SUMMARY OF HISTORICAL COSTS

Combining Marine operations and maintenance costs based on the FY 2000 Marine Ground Defense Force O and M budget of \$651,000, with the average (for FY 1999 and 2000) base operations and maintenance costs of \$419,120.50 for facilities that support the Marine security mission, as well as salaries amounting to \$440,117.18 for civilian employees associated with operating these facilities, result in a total of \$1,510,237.60 to support the current security force structure.

D. COSTS OF SUPPORTING THE FAST MISSION

Like the costs to support the current security force structure, the costs to support the FAST mission can also be divided into the general categories of Marine operations and maintenance costs and naval support costs, which essentially fund the same type of activities as before, such as security training and base infrastructure support. The difference in these costs lies in the varying monetary amounts that are a consequence of the replacement operation. As before, civilian support personnel salaries are also considered. Additional cost considerations include transportation costs for the rotating platoons, Per Diem and new physical security devices.

Based on a T/O of two officers and ten enlisted permanent party Marines that make up the company headquarters, and a maximum of four officers and 86 enlisted rotating FAST platoon Marines, the estimated O and M budget for Marine Corps Security Force Company, Guantanamo Bay, Cuba for FY 2001 would be \$101,500. (Ref. 3) Table

3.2 details the naval support costs for operating and maintaining facilities associated with supporting the FAST mission. The naval base will also incur an additional estimated \$132,000 cost for a commercial vehicle support contract (Ref. 3). The annual transportation cost for the rotating platoons is estimated to be \$447,000,¹ while the Per Diem cost is estimated to be \$94,500.²

The major physical security improvement would be to alarm and illuminate the base's perimeter fence, which is estimated to cost as much as \$1.8 million. Other security devices purchased for the mission include six hand-held thermal imagers, six spotlights, and eight laser kits, which altogether cost \$142,262. Commander-in-Chief Atlantic Fleet (CINCLANTFLT) has provided the funding for these devices. CINCLANTFLT will also provide the funding for the perimeter fence improvements once a contract is awarded. Total salaries for civilian support personnel amount to \$417,211.42³. (Ref. 3 and Ref. 4)

¹ \$680 per Marine for a military round-trip flight + \$130 for excess baggage per Marine x 6 rotations per year x 50 Marines = \$447,000. (Ref.5)

² \$3.50 per day per Marine x 90 days x 50 Marines x 6 rotations per year = \$94,500

³ There is a \$22,905 reduction in civilian salaries due to the smaller number of facilities and buildings associated with supporting the FAST mission in comparison to the Ground Defense Force.

Table 3.2 Base facilities/buildings supporting the FAST mission with associated
estimated costs for FY 2001⁴ From Ref. (3)

Building #	Function	FY01
M201	Marine Barracks/Command Post	\$27,900
2130	Communications Center/MARS Station	\$1300
1679	Quick Mess Hall	\$40,700
1678	Bachelor Enlisted Quarters (BEQ)	\$78,800
2122	Armory	\$2,100
M203	Satellite Fitness Center	\$7,000
M202	Navy Exchange Mini-mart	\$1,600
M211	Morale Welfare Recreation Swimming Pool	\$103,300
M612	Motor Transport Maintenance	\$1,768
AV622	Leeward Command Post	\$17,548
1334	Leeward Motor Transport	\$939
1868	Sentry Tower #21	\$2000
1911	Sentry Tower #24	\$2,200

⁴ Buildings AV622, M201, and M203 require some type of remodeling in order to provide adequate services. Requirements and costs associated with these improvements have not yet been determined. Both the Moral, Welfare, and Recreation department and the Naval Hospital will make the determination and provide funding for improvements to building AV622, which will accommodate a new satellite fitness center and a field medical facility. Building 1678, the Winward BEQ requires renovations amounting to \$3,015,000. This amount is not included in the O and M costs. (Ref. 3)

1912	Sentry Tower #26	\$2,000
1915	Sentry Tower #37	\$2,200
1918	Sentry Tower #43	\$2,000.00
1919	Sentry Tower #45	\$2,000.00
1920	Sentry Tower #1	\$2,800.00
1922	Sentry Tower #3	\$2,200.00
1925	Sentry Tower #6	\$2,000.00
1927	Sentry Tower #8	\$2,200.00
1932	Sentry Tower #13	\$5,200.00
1936	Sentry Tower #18	\$2,000.00
1939	Sentry Tower #31	\$2,200.00
2314	Sentry Tower #34	\$2,000.00
2313	Sentry Tower #20	\$2,067.00
	TOTALS	\$317,867.00

E. SUMMARY OF FAST SUPPORT COSTS

Combining Marine operations and maintenance costs, based on the FY 2001 Marine Corps Security Force Company, Guantanamo Bay O and M budget of \$101,500 with estimated base operations and maintenance costs of \$449,867 for facilities and contracts that support the FAST mission, along with \$447,000 cost of transporting the rotating platoons, \$94,500 for Per Diem, an estimated one time cost of \$1,942,262 for

perimeter fence improvements and additional security devices, as well as civilian salaries amounting to \$417,211.42 results in a total of \$3,452,340.40 in combined annual and one time costs to support the new security force structure. (Ref. 3 and Ref. 4)

F. NON-OPERATING COSTS

Non-operating costs are costs not attributed to the direct functioning or operating of either the Marine Ground Defense Force mission or the FAST security mission. Such costs include the cost of MOS training for Marines and military payroll. These costs are not considered because they involve costs that are paid at the component level and would not vary depending upon the structure of the security force unit. In other words, these costs would still be incurred regardless of the type of security force unit employed at Guantanamo Bay, and therefore have no bearing in this analysis. The following chapter will provide a comparison analysis of the operating costs of maintaining the Marine Ground Defense Force and the operating costs to maintain the future FAST security structure.

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IV. COST COMPARISON

A. INTRODUCTION

This chapter compares and contrasts the operating costs of maintaining the Marine Ground Defense Force versus the operating costs of maintaining a FAST security force structure. The variances in Marine Operations and Maintenance and Naval Base Support costs, as well as reasons for these variances, will be discussed. Other variances in costs, such as the additional cost to transport the rotating FAST platoons and the cost of physical security upgrades, as well as a summary of all variances, will also be presented

B. MARINE OPERATIONS AND MAINTENANCE VARIANCE

Comparing the annual O and M costs of the Marine Ground Defense Force (GDF) with the anticipated O and M costs for the FAST supported Marine Corps Security Force Company shows an annual savings of \$549,000 (see Table 4.1 below). The cost savings is realized from a reduction in Marine personnel and a lower overall Marine support structure (see Tables 2.1 and 2.2). Additionally, the naval base will now pay for motor transport support costs previously born by the Marine GDF O and M budget.

Table 4.1 Annual Marine O and M Variance

Marine GDF O and M Costs	MCSF Co. O and M Costs	(Cost)/Savings
\$651,000	\$101,500	\$549,500

C. NAVAL BASE SUPPORT COST VARIANCE

Comparing the naval base support costs for the Marine GDF and the subsequent cost for the naval base to support the MCSF Company arrives at an increase in annual cost (rather than a savings) of \$7,840. (See Table 4.2 below) This cost increase is due to an estimated \$132,000⁵ that the base will have to pay for a commercial vehicle contract to support the FAST mission. As previously stated, this cost had been paid by the Marine GDF O and M budget for maintenance, repair and fuel for their mostly tactical vehicles.

Table 4.2 Annual Naval Base Support Cost Variance

Naval Base Support Costs for Marine GDF	Naval Base Support costs for MCSF Company	(Cost)/Savings
\$859,237	\$867,078	(\$7,840)

D. ADDITIONAL COSTS TO SUPPORT THE MCSF COMPANY

Table 4.3 shows the additional cost of supporting the MCSF Company.

Transportation and per diem costs will be Marine Corps funded.⁶ There is a one-time cost of \$1,942,262⁷ to pay for the perimeter fence improvements and physical

⁵The \$132,000 estimate is base on the historical cost to operate and maintain the tactical and commercial vehicles of the Marine GDF. (Ref.3) The costs for the commercial contract may be less than the estimate since no tactical vehicles will remain due to the absence of Marine motor transport support personnel.

⁶Funding will be provided from the Marine Corps Security Force Battalion O and M budget (Ref. 3).

⁷Funding will be provided by Commander in Chief, Atlantic Fleet (Ref. 5).

security devices. Though it is a one-time a non-operating cost, the amount appears significant for decision-making purposes.

Table 4.3 Additional Costs to Support MCSF Company

Transportation Costs for Rotating Platoons (Annual)	\$447,000
Per Diem Costs (Annual)	\$94,500
Physical Security Improvements/Devices (One-Time)	\$1,942,262
TOTAL	\$2,483,762

E. SUMMARY OF VARIANCES AND ADDITIONAL COSTS

Table 4.4 summarizes the variances and additional costs to support the new security force structure. The summation results in a total cost increase of \$1,942,102 to support the FAST mission.

Table 4.4 Summary of Variances and Additional Costs

Variance/Additional Costs	(Cost)/Savings
Marine GDF O and M Costs and MCSF Co. O and M Costs	\$549,500
Naval Base Support Costs for Marine GDF and MCSF Co.	(\$7,840)
Transportation Costs for Rotating Platoons	(\$447,000)
Per Diem Costs	(\$94,500)
Physical Security Improvements/Devices	(\$1,942,262)
TOTAL	(\$1,942,102)

F. ANNUAL VERSUS ONE-TIME COSTS

It is important to note that the significant increase in costs to support the new FAST security structure is primarily a result of the one time cost of physical security improvements (mainly perimeter fence improvements) and devices as depicted in Table 4.5. Table 4.6 shows that the increase in support costs is significantly reduced to \$159 when these costs are separated from annual reoccurring costs. Therefore, from an annual budget perspective, the financial costs are essentially equal to support either the GDF or the FAST security structure.

Table 4.5 Annual Support Costs Versus One -Time Support Costs

Annual Support Costs for MCSF Company		One Time Cost for MCSF Company	
MCSF Company O and M Costs	\$101,500	Physical Security Improvements	\$1,942,262
Naval Base Support Costs	\$867,078		
Transportation Costs for Rotating Platoons	\$447,000		
Per Diem Costs	\$94,500		
Total Annual Support Costs for MCSF Company	\$1,510,078	Total One Time Costs	\$1,942,262

Table 4.6 Comparisons of Annual Support Costs

Total Annual Support Costs for Marine GDF	\$1,510,237
Total Annual Support Costs for MCSF Company	\$1,510,078
Difference (Cost Savings)	\$159

V. CONCLUSIONS AND RECOMMENDATIONS

A. FINANCIAL COST OR SAVINGS

Based on the cost comparisons from the previous chapter, there are no significant financial cost savings from exercising the FAST alternative. Even without the one-time cost of physical security improvements that amount to over 1.9 million dollars, only \$159 will be saved based on the cost data estimates. Therefore, if the decision-making emphasis were on purely financial savings, there would be little gained from restructuring the Marine security presence at Naval Station, Guantanamo Bay. But, if the decision-making process takes into account opportunity costs, restructuring makes more sense.

B. OPPORTUNITY COST

The Marine Corps Cost Factors Manual defines opportunity cost as the "benefits which might have been realized by one alternative use of resources, but which are lost if these resources are used in another option." (Ref. 6) The benefit in this context is the most efficient and effective use of Marine Corps personnel assets. The current security requirements presented in Chapter 2, which are based on the decreased threat posed by Cuban military forces, allow for the use of a security force smaller than the table of organization of 21 officers and 318 enlisted Marines that make up the current Marine Ground Defense Force. By executing the FAST security option, the Marine Corps would achieve a net gain of 12 officers and 266 enlisted Marines (See Table 5.1). More benefit

would be gained from reallocation of these manpower resources to areas where they could be used more effectively, such as the formation of additional FAST platoons. If the Marine Ground Defense Force continues to operate at its current T/O, the opportunity to achieve the benefit of efficient allocation of manpower resources would be lost.

Table 5.1 Personnel Savings From Ref. (4)

	Officers	Enlisted
Table of Organization of Marine GDF	21	318
Less Table of Organization of MCSF Company	2	14
Less Personnel Transferred to Marine Corps Security Force Battalion in support of FAST initiative	7	38
Total Personnel Savings	12	266

C. COST EFFECTIVE ALTERNATIVE

According to the Marine Corps Cost Factors Manual, the cost effective alternative is the alternative "that maximizes benefit when cost for each alternative is equal." (Ref. 6) Though there are no real financial savings achieved by restructuring Naval Station, Guantanamo Bay's Marine security force using rotating FAST platoons. The use of these platoons in place of the Marine Ground Defense Force does provide one cost effective alternative to achieving security objectives of the Marine Corps and the Navy at Guantanamo Bay. The FAST platoon structure alternative provides significant benefit

from manpower savings while the Marine Ground Defense Force alternative results in the opportunity cost of lost manpower efficiencies.

D. OTHER ALTERNATIVES

This thesis has focused on the use of rotating FAST platoons as an alternative to the Marine Ground Defense Force. Other, more cost effective alternatives may exist (e.g., outsourcing), but were not explored in this study. In light of the decreased security threat to Naval Station, Guantanamo Bay, other options that could provide even further cost savings should be considered for future research.

E. EPILOGUE

The Marine Corps fully understands the benefits of the efficient use of manpower resources as evidenced by the re-designation of the Marine Corps Ground Defense Force as Marine Corps Security Force Company, Guantanamo Bay Cuba, on September 1, 2000. The force structure gained from the full adoption of the FAST replacement proposal will allow the Marine Corps to provide for both a continued security presence in Guantanamo Bay, as well as additional security forces in the form of additional FAST platoons. In turn, these additional platoons will enhance the Marine Corps' ability to combat the ever increasing worldwide threat of terrorist attacks (as shown by the recent attack on the U.S.S. Cole), against U.S. military bases and personnel.

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GLOSSARY

BEQ	Bachelor Enlisted Quarters
CINCLANTFLT	Commander in Chief Atlantic Fleet
CONUS	Continental United States
COMNAVSTA	Commander Naval Station
CQB	Close Quarters Battle
FAST	Fleet Antiterrorism Security Team
FY	Fiscal Year
GDF	Ground Defense Force
GTMO	Guantanamo
MOS	Military Occupational Specialty
MCSFCO	Marine Corps Security Force Company
MCSFBN	Marine Corps Security Force Battalion
NEO	Non-combatant Evacuation Operation
O and M	Operations and Maintenance
T/O	Table of Organization

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